

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0971; Directorate Identifier 2014-SW-055-AD;

Amendment 39-18035; AD 2014-24-02]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014-07-51 for AgustaWestland S.p.A. Model AB139 and AW139 helicopters with certain main rotor (M/R) rotating scissors installed. AD 2014-07-51 required repetitively inspecting the M/R rotating scissors for play of the lower half scissor spherical bearing (bearing) and removing the bearing if there was play beyond allowable limits. AD 2014-07-51 also required removing all affected bearings. AD 2014-07-51 was prompted by reports of certain bearings dislodging from certain M/R rotating scissors. This new AD retains the requirements of AD 2014-07-51, expands the applicability, and requires installing a special nut. These actions are intended to detect excessive play of the bearing and prevent failure of the M/R rotating scissors and subsequent loss of control of the helicopter.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of August 20, 2014 (79 FR 45329, August 5, 2014).

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- <u>Federal eRulemaking Docket</u>: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
 - Fax: 202-493-2251.
- <u>Mail:</u> Send comments to the U.S. Department of Transportation, Docket
 Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
 Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m.,
 Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (EASA) AD, any incorporated by reference service information, the economic evaluation, any comments received, and other information. The street address

for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39 0331-664680; or at http://www.agustawestland.com/technical-bulletins. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

FOR FURTHER INFORMATION CONTACT: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email robert.grant@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report

summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

On March 27, 2014, we issued Emergency AD (AD) 2014-07-51. AD 2014-07-51 was published in the Federal Register as a Final rule; request for comments on August 5, 2014, at 79 FR 45329. AD 2014-07-51 applied to Agusta Model AB139 and AW139 helicopters with certain serial-numbered M/R rotating scissors or with a M/R rotating scissors with certain serial-numbered bearings. AD 2014-07-51 required repetitively inspecting the M/R rotating scissors for play of the bearing every 5 hours time-in-service (TIS) and, if there was play beyond allowable limits, removing the affected bearing. AD 2014-07-51 also required removing all affected bearings within 50 hours TIS. AD 2014-07-51 was prompted by reports of certain bearings dislodging from certain M/R rotating scissors, as advised by EASA in its Emergency AD No. 2014-0073-E, dated March 20, 2014.

Actions Since AD 2014-07-51 Was Issued

After we issued AD 2014-07-51, AgustaWestland issued Bollettino Tecnico No. 139-392, dated September 23, 2014 (BT 139-392), for Model AB139 and AW139 helicopters. BT 139-392 specifies installing a "special" nut to prevent the bearing from dislodging and performing an interim inspection to monitor the bearing in service.

EASA subsequently issued Emergency AD No. 2014-0215-E, dated September 24, 2014, which supersedes EASA Emergency AD No. 2014-0073-E, to correct an unsafe condition for AgustaWestland S.p.A and AgustaWestland Philadelphia Corporation

Model AB139 and AW139 helicopters. EASA advises of additional reports of early excessive play in the bearings and a report of a chipped bearing liner. These additional reports involve bearings that were not part of the specific bearings referenced in EASA AD No. 2014-0073-E. As a result, EASA AD No. 2014-0215-E expands the applicability to all M/R rotating scissors with the applicable part number, requires repetitive inspections, and requires installation of a "special" nut in accordance with BT 139-392.

FAA's Determination

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with Italy, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

Related Service Information

AgustaWestland issued AW139 Document Code 39-C-62-31-00-00A-286C-A, issue 001, dated August 6, 2012, for Model AB139 and AW139 helicopters to specify a detailed inspection of the fixed swashplate and rotating scissors.

AgustaWestland also issued Bollettino Tecnico No. 139-368, dated March 19, 2014 (BT 139-368), for Model AB139 and AW139 helicopters with M/R rotating scissors, part number (P/N) 3G6230A00733 either with certain serial numbers or which have been repaired with the installation of certain serial-numbered bearings, P/N 3G6230V00654. BT 139-368 also applies to affected parts kept in stock. BT 139-368

was issued to identify and replace potentially defective bearings caused by a supplier quality issue.

AgustaWestland later issued BT 139-392 for Model AB139 and AW139 helicopters with M/R rotating scissors P/N 3G6230A00733 installed. BT 139-392 specifies inspections to monitor the bearings and provides procedures for the installation of special nut, P/N 3G6230A06851, to reinforce the installation of each bearing.

AD Requirements

This AD retains and clarifies the inspections of the M/R rotating scissors for damage and play of the bearing, but changes the inspection interval. This AD requires replacing the nut with a special nut, which lengthens the time for repetitively inspecting the M/R rotating scissors for damage and play of the bearing. This AD also retains the requirement to remove certain serial-numbered rotating scissors and certain serial-numbered bearings from service. Lastly, this AD states the design holder's name as Agusta S.p.A. instead of AgustaWestland S.p.A. as specified by the current FAA type certificate.

Differences between this AD and the EASA AD

The EASA AD does not retain all of the requirements of its superseded AD, while this AD does retain the prior AD requirements. The EASA AD specifies some compliance terms within calendar time, while this AD does not. The EASA AD requires contacting AW139 Product Support Engineering, and this AD does not.

Interim Action

We consider this AD to be an interim action. If final action is later identified, we might consider further rulemaking.

Costs of Compliance

We estimate that this AD affects 102 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD.

Labor costs are estimated at \$85 per work-hour. Visually inspecting the M/R rotating scissors for damage and play requires a minimal amount of time, for a nominal cost per inspection. Performing the detailed inspection for bearing play requires about 1 work-hour for a cost of \$85 per inspection. Removing a bearing requires about 2 work-hours and \$808 in parts, for a total replacement cost of \$978 per bearing. Installing the special nuts requires about 1 work-hour and \$920 in parts, for a total modification cost of \$1,005 per helicopter or \$102,510 for the U.S. fleet.

According to AgustaWestland's service information, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by AgustaWestland. Accordingly, we have included all costs in our cost estimate.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the unsafe condition can adversely affect the controllability of the helicopter and some of the required corrective actions must be accomplished within 5 hours TIS and thereafter every 24 hours for certain helicopters. Other required corrective actions in this AD must be accomplished within 25, 50, and 100 hours TIS; however, these helicopters are generally high-usage

aircraft and could reach these compliance times within a very short calendar time.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impracticable and contrary to the public interest and that good cause exists for making this amendment effective in less than 30 days.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- Is not a "significant rule" under DOT Regulatory Policies and Procedures
 (44 FR 11034, February 26, 1979);
- 3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2014-07-51, Amendment 39-17902 (79 FR 45329, August 5, 2014), and adding the following new AD:

2014-24-02 **Agusta S.p.A.** (**Agusta**): Amendment 39-18035; Docket No. FAA-2014-0971; Directorate Identifier 2014-SW-055-AD.

(a) Applicability

This AD applies to Agusta Model AB139 and AW139 helicopters with main rotor (M/R) rotating scissors part number (P/N) 3G6230A00733, with a lower half scissors spherical bearing (bearing) P/N 3G6230V00654 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as excessive play of the bearing in the M/R rotating scissors. This condition could result in failure of the M/R rotating scissors and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD 2014-07-51, Amendment 39-17902 (79 FR 45329, August 5, 2014).

(d) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

(1) For helicopters with the M/R rotating controls installed without special nut P/N 3G6230A06851, within 5 hours time-in-service (TIS), and thereafter before the first flight of each day or at intervals not exceeding 24 hours, whichever occurs later; and for

helicopters with the M/R rotating controls installed with special nut P/N 3G6230A06851, within 25 hours TIS, and thereafter at intervals not exceeding 25 hours TIS:

- (i) Visually inspect the M/R rotating scissors for damage using a light source and a magnifying glass, paying particular attention to the bearings. Some examples of damage are shown in Figures 4 through 8 of AgustaWestland Bollettino Tecnico No. 139-392, dated September 23, 2014 (BT 139-392). If there is damage, before further flight, remove the bearing.
- (ii) Inspect the M/R rotating scissors for play of each bearing, paying particular attention to the bearing staking condition, by manually moving the lower half scissor along the axis of the spherical bearing. Refer to Figure 1 of BT 139-392. If there is play, before further flight, accomplish a detailed inspection of the M/R rotating scissors in accordance with steps 9.1 through 12.9 of AgustaWestland AW139 Document Code 39-C-62-31-00-00A-286C-A, Rotating control installation Fixed swashplate and rotating scissors Detailed inspection, issue 001, dated August 6, 2012. Any play beyond allowable limits requires removing the bearing before further flight.
- (2) Within 50 hours TIS from August 20, 2014, remove any bearing from a M/R rotating scissors with serial numbers (S/N) listed in Table 1 of AgustaWestland Bolletino Tecnico No. 139-368, dated March 19, 2014 (BT 139-368), on which the bearing has never been replaced; or from a M/R rotating scissors on which the bearing was replaced with a bearing with a S/N listed in Table 2 of BT 139-368.
- (3) Within 100 hours TIS, install special nut P/N 3G6230A06851 in accordance with steps 5.1. through 6., Part II, of the Compliance Instructions, of BT 139-392.

- (4) Prior to installing a M/R rotating scissors with a S/N listed in Table 1 of BT 139-368, replace the bearing and re-identify the M/R rotating scissors in accordance with paragraphs 4.2 through 4.4., Part II, of the Compliance Instructions of BT 139-368.
- (5) Do not install a bearing with a S/N listed in Table 2 of BT 139-368 into any M/R rotating scissors.

(g) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email robert.grant@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(h) Additional Information

The subject of this AD is addressed in European Aviation Safety Agency (EASA) Emergency AD 2014-0215-E, dated September 24, 2014. You may view the EASA AD on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2014-0971.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6200, M/R System.

(j) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
 - (i) AgustaWestland Bollettino Tecnico No. 139-392, dated September 23, 2014.
 - (ii) Reserved.
- (4) The following service information was approved for IBR on August 20, 2014 (79 FR 45329, August 5, 2014).
 - (i) AgustaWestland Bollettino Tecnico No. 139-368, dated March 19, 2014.
- (ii) AgustaWestland AW139 Document Code 39-C-62-31-00-00A-286C-A, Rotating control installation Fixed swashplate and rotating scissors Detailed inspection, issue 001, dated August 6, 2012.
- (5) For AgustaWestland, Product Support Engineering, Via del Gregge, 100, 21015 Lonate Pozzolo (VA) Italy, ATTN: Maurizio D'Angelo; telephone 39-0331-664757; fax 39 0331-664680; or at http://www.agustawestland.com/technical-bulletins.
- (6) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

Issued in Fort Worth, Texas, on November 17, 2014.

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Kim Smith,

Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2014-27995 Filed 11/26/2014 at 8:45 am; Publication Date: 11/28/2014]